

**Remarks/Arguments**

Claims 1-18 and 20 are pending in the Application.

Claims 1-18 and 20 are rejected.

Claim 16 is amended herein.

Claims 21-29 are added herein.

I. **OBJECTION TO THE SPECIFICATION**

The Examiner, under 35 U.S.C. 132(a), has objected to Applicant's amending of paragraph [0025] of the specification in a 37 C.F.R. § 1.111 Amendment filed October 18, 2005.

Applicant has herein further amended paragraph [0025] such that it is now identical to that originally filed.

II. **REJECTIONS UNDER 35 U.S.C. § 112, ¶1**

The Examiner has rejected Claims 1-15 under 35 U.S.C. § 112, ¶1 for allegedly failing to comply with the written description requirement. Regarding independent Claims 1 and 10, the Examiner contends that "each recite a new limitation that requires forming of a contiguous layer of liquid by exposing the fluid to an electromagnetic field," but that "[t]he examiner finds no disclosure pertaining to the use of an electromagnetic field to form of a contiguous layer of liquid." Office Action, at 2-3.

Applicant respectfully points out that amended paragraph [0025] (i.e., the version originally filed) of the present Application states:

[0025] Referring to Figs. 3, 4 and 5, an important requirement in obtaining accurate reproduction of template active area 52 in polymer material 76c is ensuring that material 76a *completely spreads* over a region of substrate 20 in superimposition with active area

52 in a time efficient manner. To that end, template 14 is configured to apply an *electromagnetic field* to material 76a so that the same may be attracted to a perimeter of a region of substrate 20 in superimposition with active area 52, while being confined to that region. To that end, template 14 includes a conducting region 18 to facilitate generation of an EM field, shown more clearly in Figs. 6 and 7. (*Emphasis Added*)

From the above paragraph, and within the context of the overall Application, one of ordinary skill in the art would understand that by using an electromagnetic (EM) field to completely spread material 76a (as spaced apart droplets), one is using an EM field to form a contiguous layer of material 76a.

As a result of the foregoing, Applicant respectfully requests that the Examiner withdraw the rejection of Claims 1-15 under 35 U.S.C. § 112, ¶1.

### III. REJECTIONS UNDER 35 U.S.C. § 112, ¶2

The Examiner has rejected Claims 16-18 and 20 under 35 U.S.C. § 112, ¶2, as "being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention." Specifically, the Examiner contends that while Claim 16 recites the limitation "while compressing the plurality of spaced-apart droplets," there is insufficient antecedent basis for such a limitation. Office Action, at 3.

Applicant has amended Claim 16 to re-establish antecedent basis for above-mentioned limitation.

### IV. REJECTIONS UNDER 35 U.S.C. § 102

The Examiner has rejected Claims 1-18 and 20 under 35 U.S.C. § 102(e) as being anticipated by Sreenivasan et al., U.S. Patent No. 6,908,861 ("*Sreenivasan*"). Office Action at 4. The Examiner has additionally rejected Claims 16-18 and 20 under 35 U.S.C. § 102(e) as being

anticipated by Willson et al., U.S. Patent Application Publication No. 2003/0215577 ("*Sreenivasan*"). Office Action at 4.

All of the claims rejected under this section are directed to methods of using an electromagnetic field to spread a liquid, initially as spaced-apart droplets, over an area of a substrate that is in superimposition with a template.

*Sreenivasan* teaches using an electric field to shape curable liquid precursor. Referring to FIGS. 35 A-D and 36 A-C of *Sreenivasan*, "[a]n electric field of the desired magnitude may be applied resulting in the attraction of activating light curable liquid 1208 towards the raised portions 1216 of template 1200." See *Sreenivasan*, col. 33, ll. 24-28. While in a different embodiment *Sreenivasan* does teach that "a curable liquid 40 is dispensed onto a substrate 20 as a pattern of lines or droplets," it is "the force of the template on the liquid [that] causes the liquid to spread over the surface of the substrate 20." See *Sreenivasan*, col. 28, ll. 25-31. There is no teaching or suggestion in *Sreenivasan* to use an electric field to spread the liquid over the surface of the substrate. Accordingly, Claims 1-18 and 20 are not anticipated by *Sreenivasan*.

Being similar to *Sreenivasan*, *Willson* teaches using electric fields to create high-resolution patterns in a polymerizable liquid composition. Referring to FIGS. 2 and 3, "[a]n electric field of the desired magnitude may be applied resulting in the attraction of the polymerizable composition towards the raised portions of the template. See *Willson*, para. [0029]. There is no teaching or suggestion in *Willson* to use an electric field to spread the liquid over the surface of the substrate. Accordingly, Claims 16-18 and 20 are not anticipated by *Willson*.

Additionally regarding Claims 16-18 and 20, Applicant notes that Claim 16 has been amended to include the limitation of a "plurality of spaced-apart droplets," which the Examiner has acknowledged *Willson* does not teach. Office Action at 5.

As a result of the foregoing, Applicant respectfully requests that the Examiner withdraw the rejection of Claims 1-18 and 20 under 35 U.S.C. § 102(e) as being anticipated by

*Sreenivasan*, and the rejection of Claims 16-18 and 20 under 35 U.S.C. § 102(e) as being anticipated by *Willson*.

## V. DOUBLE PATENTING REJECTIONS

The Examiner has rejected Claims 16-18 and 20 under the judicially-created doctrine of obviousness-type double patenting as being unpatentable over the claims of Willson et al., United States Patent No. 6,964,793 ("*Willson II*").

Like *Sreenivasan* and *Willson*, *Willson II* is directed to the use of electric fields to create high-resolution patterns in a polymerizable composition. Referring to FIG. 4 of *Willson II*, "the replication of the pattern on the template may be achieved by applying an electric field between the template and the substrate," wherein "an electrostatic force may be generated that attracts regions of the liquid toward the template." See *Willson II*, col. 5, ll. 10-17. *Willson II* neither teaches nor suggests the use of an electric field to spread the liquid over the surface of a substrate. Accordingly, Claims 16-18 and 20 are not unpatentable in view of *Willson II*.

Applicant additionally points out that Claim 16 has been amended to include the limitation of a "plurality of spaced-apart droplets," which *Willson II* fails to teach.

As a result of the foregoing, Applicant respectfully requests that the Examiner with the rejection of Claims 16-18 and 20 under the judicially-created doctrine of obviousness-type double patenting as being unpatentable over the claims of *Willson II*.

## VI. ADDED CLAIMS

Claims 21-29 are added herein. Support for such claims can be found in para. [0025] of the present Application. No new matter is introduced as a result of such amending.

VII. CONCLUSION

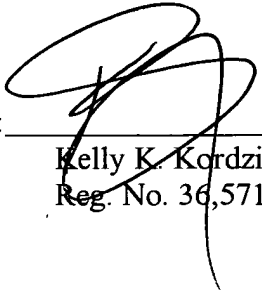
As a result of the foregoing, it is asserted by Applicant that the Claims in the Application are now in a condition for allowance, and respectfully request an allowance of such Claims.

Applicants respectfully request that the Examiner call Applicants' attorney/agent at the below listed number if the Examiner believes that such a discussion would be helpful in resolving any remaining problems.

Respectfully submitted,

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